

D & D SUBGROUP HIGHLIGHTS
JULY 13, 1999

This meeting was held in the EESB Cayuse Room. The meeting began at 9:00 a.m.

CDI Update

Kim Koegler reported that there are two RFI's on the street now. One RFI deals with engineering and technology, including concrete sealants, operations modeling, etc. This RFI closes July 30 and the results will be used in a report due at the end of the fiscal year. The second RFI, also closing on July 30, deals with manipulator systems to be used in radiation zones. This RFI is in support of AEA funded work. Fourteen vendors have been contacted for this work. AEA is to evaluate the data received to see if development is needed or if a commercial system could be used. Infrared, Inc. is now onsite using thermography to identify liquids in pipes on the gallery and deck. The work in the field is almost complete and then an ITSR document will be written describing the results. The Andros robot is scheduled to go into the ventilation tunnel by the end of the fiscal year. Prior to the Andros robot entry, data will be collected in August using the HGT vehicle, a smaller robot.

AIL is scheduled to do 3-D imaging work starting in August. This work is being done as a FETC PON. Also in August, ultrasonics will be used for liquid detection. Concrete deck samples are now being collected at ¼" depth. After this, samples will be taken in cells and maybe in the rail tunnel. A number of coring systems may be analyzed next year when samples at 6" will be taken.

Personnel Changes

Kim Koegler announced that Jerry White is going to be working only a couple of days a week. Abdul Dada will be managing the Technology Applications group at BHI. Dave Langstaff announced that he is going to be on a special assignment to the Spent Nuclear Fuel Program for six months. Roger Pressentin will be taking over for Dave as co-chair of the subgroup.

ASTD Updates

Ron Borisch provided information about a new laser demonstration that is being funded with Hanford EM-60 money. They are getting quotes from GSI Lumonics, Inc. out of Watertown, Massachusetts, on cutting up a non-radioactive glovebox at the Livonia, MI facility. Ron said there was \$ 50K to perform the test on the FMEF glovebox that contains a lead liner to see if the HEPA filter system will contain the lead and how quickly the laser can cut the glovebox.

Ron updated the subgroup on the ASTD project that we are jointly working on with NTS and LANL. The funding has arrived for this work and the specifications are being put together now. The laser that we sent to LANL will not be used in this ASTD project as it is not easily transported. A new GSI Lumonics laser will be used and will be trailer mounted this fiscal year. Our old laser is still being used to cut up munitions at LANL.

Dave Langstaff gave an update on the Robot Work Platform ASTD. The draft technical requirements are out for comment now. The procurement package is being put together now and the RFP is to be issued July 30.

Miscellaneous Topics

Greg Berlin showed a video of the Personal Ice Cooling System (PICS). Hanford has four complete suits and six vests to demonstrate in the field. The temperature is regulated by how fast you pump the ice water through the suits. The ice packs can be quickly replaced so as to keep the worker on task longer. The cost of a full suit is \$1600. Greg has a viewgraph presentation about the PICS given by the vendor, Delta Temax, Inc., that will be sent to all subgroup members. Fernald also produced a one-page technology fact sheet on PICS that will be sent to all members.

Sue Garret provided more information on the Fernald mobile work platform. The draft ITSR was distributed to all subgroup members after last month's subgroup meeting. Sue stated that the platform costs \$400K and that the robot arm can go 30 feet up and 20 feet below the unit. Sue said that if several projects could use it, then it may be cost effective to purchase one platform for Hanford.

Greg Berlin stated that editing is now being done on the Hanford S&T needs and that a CD ROM version will be done in August and then distributed. They are looking to have an Internet version done by the end of this fiscal year.

Dave Langstaff started a discussion about the Nuclear Materials and Spent Nuclear Fuel Focus Areas. A meeting was held recently to discuss if our D & D Subgroup or the MW Subgroup should deal with the Hanford needs in these two areas. The Nuclear Materials FA will deal with Savannah River materials, WIPP or Yucca Mountain materials, and other materials that cannot be sent anywhere yet. The decision paths are not yet set for most of this material so planning cannot be done. The materials are not all wastes. Hanford members, on DOE Complex-wide groups, are dealing with Pu and U. We need to keep in touch with these individuals to stay on top of what is happening with the Nuclear Material and Spent Nuclear Fuel Focus Areas.

ISMS Principles

Dave Langstaff discussed the Integrated Safety Management System (ISMS). This time he concentrated on the seven principles of ISMS since he had previously discussed the five core functions. Dave distributed a portion of the DOE policy on ISMS from 1996 and 1997.

Dave reviewed the five core functions: *Define the Scope of Work, Evaluate or Analyze Hazards, Implement Hazard Controls, Perform the Work, and Evaluate Performance/Provide Feedback*. The seven principles were then discussed.

- First principle: *line management's responsibility for safety*, which defines the leadership for safety at DOE sites.
- Second principle: *clear roles and responsibilities*, which states that *who* has authority for *what* should be unambiguously defined and enforced.
- Third principle: *competence should be commensurate with responsibilities* so that personnel are trained and ready to safely carry out their duties.
- Fourth principle: *balanced priorities*, which says that resources should be effectively allocated between safety and operations or doing the work.
- Fifth principle: *identification of safety standards and requirements*. Included in this principle is the identification of hazards and technology and other ways to mitigate their impacts.
- Sixth principle: *hazard controls* tailored to the work being performed.
- Seventh principle: *operations authorization*, which deals with the chain of command and how to establish control over hazard management.

A key to successfully implementing an ISMS is to involve the workers all the way throughout the effort. ISMS is being implemented by DOE throughout the nation.

Upcoming Events

Pam Brown mentioned that Gerald Boyd is scheduled to be in the Tri-Cities on September 16. In addition, the Site Specific Advisory Board will meet on September 21 in the Tri-Cities. This group will discuss the STCG involvement with stakeholders and Nancy Uziemblo, of Ecology, is scheduled to address the meeting on the topic.

The Western Governors Association will be holding a workshop on contract reform and regulatory flexibility on July 20 and 21. All STCG members are invited to attend. Gary Ballew is hosting a presentation on the Pioneer Robotics system by LLNL and ORNL individuals. The meeting will be on July 27 in the ETB Columbia River Room. Information on the Pioneer technology will be sent to all subgroup members prior to the meeting.

The next D & D Subgroup meeting will be August 10 at 9 a.m. in the ETB Spokane River Room.

D&D Subgroup Meeting Attendees 07/13/99

Greg Berlin	FDH-TM	372-4352
Ron Borisch	BWHC	372-3382
Dennis Brown	DOE/STP	372-4030
Pam Brown	HAB	943-7348
Sue Garrett	PNNL	372-4266
Bob Julian	Ecology	736-5702
Kim Koegler	BHI	372-9294
David Langstaff	DOE-RL/AMF	376-5580
Roger Pressentin	DOE	376-1291
Scott Spencer	BWHC	376-4478
Steve Weakley	PNNL	372-4275

